Fertilizer facts

Fertilizers are crucial for closing the 'yield gap'

Why are some farmers less productive than others?

Farmers may achieve very different yield levels under similar agroecological conditions. The 'yield gap' represents the difference between farmers' actual and attainable yields and is often caused by poor access to agricultural inputs and to knowledge.

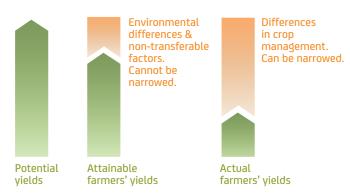
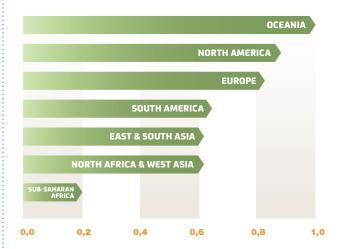


Illustration of the yield gap

How big are yield gaps?

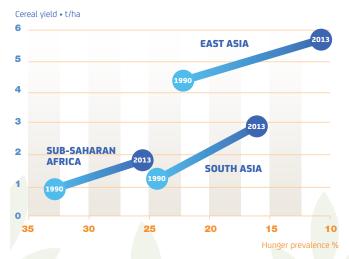
Yield gaps may be substantial. For instance, in Sub-Saharan Africa the average maize yield is only one fifth of the attainable yield.



Ratio between actual yields and attainable yields for maize

Why do yield gaps matter?

High yield gaps are clearly correlated with increases in hunger prevalence.



Relation between prevalence of hunger and cereal yield, 1990-92 and 2011-13

How can we narrow the yield gap?

Yield gaps can be narrowed through adoption of existing best management techniques and technologies, and improved access to inputs and finance.

Farmers' yields are often limited by nutrient availability, making mineral fertilizers crucial for bridging yield gaps. Because fertilizer is a bulky product and its efficient use is knowledge-intensive, improving market infrastructures and access to best practices are priorities.



Right Source

Match fertilizer type to crop needs



Right Rate Match amount of fertilizer to crop needs



Right Time Make nutrients available when crops

need them



Right Place Keep nutrients where crops can use them

Nutrient stewardship approach